Research Article

The Impact of Online Learning for a Mother and theReadiness of Undergoing 4.0 and Preparing 5.0Eras Pasca Pandemic

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Abstract.
Even though, Indonesia is already in the 4.0 era which is called as the industrial revolution era, but it has not been able to force the world of education as a whole to switch to the "online" world. In practice, the application of blended learning is still an option for teachers because some regions are not ready to use it both in terms of educational facilities and the quality of teachers. However, the covid19 become an instant changer of the education worldwide. The necessity of social distancing is a requirement that the learning process must be carried out from home and all teachers and parents, namely mothers, must change the rule suddenly. These changes must be adopted by mothers suddenly to become teachers of the online era. This study aims to describe the impact of online learning for mothers during a pandemic to see the readiness of mothers to undergo an online era in the 4.0 era and prepare for the 5.0 era. The study used a descriptive analysis method with a qualitative approach. The population and sample of this study were 60 mothers in several elementary schools in each sub-district in Padangsidimpuan City. The data collection technique used was a questionnaire instrument. The results showed that the percentage of mothers' answers obtained was that they felt stressed by online learning during the Covid19 pandemic and were not ready to undergo the 4.0 to 5.0 era.

Keywords: Online learning; 4.0 era; industrial revolution; covid-19 pandemic

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1. Introduction

In the last few months, there have been many changes that have occurred in the world, both in terms of economy and education. There are various problems that are present with the current status of the Covid 19 pandemic. One sure thing is the economy "collapse" as an impact of pandemic, but no less experienced more severe problems is education. The United Nations (UN) itself has become annoyed by the fact that many countries have decided to close schools and universities. As reported in ABC News on, March 7, 2020 school closings occurred in more than dozens of countries due to the

covid19. Then, UNESCO evaluation shows that there are at least 290.5 million students worldwide who are learning activities to be disrupted because the school was closed. As many as 13 countries including Italy, Japan, China, and USA have also closed schools to stop the spread of this virus.The rapid spread of this virus impacts all aspects of human activity globally, ranging from education, research, sports, entertainment, transportation, worship, economic, business, and public meetings or social interactions as a result of the Lockdown and Social Distancing policies implemented by the Government. The reality of such a situation is difficult to bear, and the education sector remains one of the hardest hit by the Covid-19 outbreak [1].

Indonesia also adoptedsocial distancing and physical distancing. This policy prohibits everyone from congregating and even having to maintain a distance from other people to prevent the spread of the covid19 virus. The central and local governments agreed to close schools with red and yellow zone status. So that, schools must continue to carry out the educational process takes place via online.

Online learning is a learning methodthat carried out via the internet network (1) . This is a mandatory choice during the Covid19 pandemic. Even though, we have entered the era of 4.0 or the industrial revolution era, that is marked by using theInternet of things system (IoT), which does not make mothers as parents familiar with online learning.

Not to mention the era of society 5.0 that presents integrated technology in bigdata. Responding to the readiness of the world of education to welcome this, in the context of learning students are accustomed to think critically and constructively, this way of thinking is often the teacher's reference in making HOTS-based (higher order thinking skills) questions. This has been the duty and responsibility of teachers at school. The government often holds outreach and training on this to teachers to strengthen the role of teachers in preparing students for the 4.0 to 5.0 era. However, in fact, what is currently happening due to a pandemic is a sudden change in learning where the teacher is a mother at home. Children learn with material that is sent online by the teacher and spoken and done together with the mother at home.

Mothers from any background are required to become teachers for their children at home. The responsibility which has been fully given by the majority of mothers to schools to educate their children now back to mother. Are you overwhelmed until you are stressed or are you happy because you have plenty of time to interact with your children to strengthen your bonding? And finally ready to live at the real 4.0 era towards the 5.0 era?

Padangsidimpuan city itself is one of the regions in the province of North Sumatra with the highest number of female workers. Based on written data, out of a total of 5,067

civil servants, 3,183 are women. Not to mention female employees in BUMN or other private companies. According to Sormin(2019) 70% of the women are of productive age and have elementary school age children. So the strongest question of the problem during the pandemic is whether these mothers are able to become teachers for their children in this online period? How is the impact of this online learning for mothers? Strengthen bonding with children or trigger stress? Ready these women undergo age 4, 0 into the 5.0 era after a pandemic?

2. Methods

This study uses a descriptive analysis method with a qualitative approach. Undergraduate (2001) explains that "descriptive research is research that seeks to describe a symptom, event, incident that occurs in the present. This research is intended to describe the impact of online learning for mothers and readiness for the 4.0 to 5.0 era after the pandemic.

Population and Sample of the research are the mothers of students from elementary schools in several districts in the city's air Padangsidimpuan number of 60 people. The data collection technique used was a questionnaire instrument containing 10 questions and 2 yes or no answers. The instrument had previously been tested for validity and reliability. The questions asked to determine the impact of online learning for mothers during the Covid-19 pandemic are as follows:

TABLE 1: Parents Questionnaire.

No.	Question
1.	Online learning confuses me because I don't understand the learning material
2.	Online learning adds to my work and makes me inconvenient
3.	Online learning adds to my expenses to buy internet quota
4.	Online learning made me scold my children more and more
5.	Online learning making office work / housework I neglected
6.	Online learning makes my child bored / bored quickly
7.	Online learning made me fight more and more frequently with my husband and did not have the time
8.	Online learning leaves me unable to control the use of gadgets for myself and my children
9.	I have difficulty getting children to study and do assignments
10.	I am unable to help my child master online learning programs or applications in carrying out their study assignments

After distributing questionnaires to all parents of students, data analysis was carried out using the percentage formula as follows:

$$P = \frac{F}{N} x \ 100\%(1)$$

P = Percentage sought

F = Frequency

N = Number of respondents

TABLE 2: percentage interpretive criteria.

Percentage	Category
P> = 85%	Very stressed and unprepared
70% <= P <85%	Stressed and unprepared
50% <= P <70%	Not stressed and ready
P <50%	Very stress free and very prepared

3. Results and Discussion

This research is intended to describe the impact of online learning for mothers and readiness for the 4.0 to 5.0 era after the pandemic. Based on the table above, parents' answers to online learning during the Covid-19 pandemic showed an average of 80, 17 % with stress and unprepared categories. In the first statement obtained a score of 100%. This shows that online learning during the Covid-19 pandemic did make parents confused because the different educational backgrounds and limited knowledge they had were not comparable to the learning of elementary school children who are currently growing rapidly. Asking Google is an alternative, but sometimes there are things these mothers don't understand. Even these mothers often ask questions via cyberspace via Facebook if they don't know the answers to children's questions.

The second statement, get a score of 93, 33 % in the very stress category and muchunprepared. The status of working moms is the main reason for these mothers to be so busy going online. Obligations in the public sphere and obligations in the domestic sphere (household) during the normal period before the pandemic alone made it difficult for them, especially now that they are added to the full "impromptu" profession of being a teacher for children at home.

The third statement is that 100% of mothers have to spend more to buy internet quota. Internet quota is a basic need that must be provided when implementing online learning. The Quoted from [2] that online learning in its implementation uses the internet network by utilizing information technology. Therefore, all parents feel they

TABLE 3: The research results obtained.

No.	Question	Percentage of Answers	
		Yes	Not
1.	Online learning confuses me because I don't understand the learning material	100.00%	0.00%
2.	Online learning adds to my work and makes me inconvenient	93.33%	6.67%
3.	Online learning adds to my expenses to buy internet quota	100.00%	0.00%
4.	Online learning made me scold my children more and more	75.00%	25.00%
5.	Online learning neglects my office work / household chores	50.00%	50.00%
6.	Online learning makes my child bored quickly	41.67%	58.33%
7.	Online learning made me fight more and more frequently with my husband and did not have the time	50.00%	50.00%
8.	Online learning leaves me unable to control the use of gadgets for myself and my children	98.33%	1.67%
9.	I have difficulty getting children to study and do assignments	100.00%	0.00%
10.	I am unable to help my child master online learning programs or applications in carrying out their study assignments	93.33%	6.67%
	Average	80.17%	19.83%

have to pay more to buy internet quota. Because the internet data is use more in this condition. Even though there is internet quota assistance from the government, it is not sufficient because some mothers have to learn via YouTube to find answers to existing materials. YouTube does not get free access from the governmenth.

In the fourth statement, there is a percentage of 75% of mothers scolding their children more often, and 25% feel they are not. Online conditions force mothers to suddenly understand teaching strategies while only mastery of materials and use of gadgets, some of these mothers do not understand. Disciplining children to listen to material and then do assignments is the biggest challenge for parents with elementary school age children.

The fifth statement with a percentage of 50% of mothers felt that office / household work was neglected and 50% felt it had no effect. The problem with mothers is that children often find themselves playing games while studying when these mothers "take up" work with household chores, or for working moms who have office hours, some of these mothers sometimes have to leave their work to accompany their children to study because of bills. The work of the teacher remains.

In the sixth statement, getting a percentage of 50% of mothers thought that online learning made their children bored quickly, and 50% believed that online learning did not make their children bored quickly. Online learning is flexible, can be accessed anytime and anywhere, so this learning is quite fun. As Sobron's opinion[3] states that online learning makes students happy, they can listen through an Android cell phone, laptop or computer, not just listening to books. Online learning can indeed make children bored quickly, because they cannot study together with their peers and cannot meet face to face with the teacher. According to AuliaLuqman Aziz, a Brawijaya University Education Specialist in [4]argues that good learning is learning that is carried out face-to-face with the teacher and his friends. With this interaction, students will get added value in the social, cultural, ethical and moral maturation process.

The next item is the seventh statement, getting a percentage of 50% Online learning makes me fight more often with my husband and do not have the time and 50% choose that online learning does not make them fight. This fight was triggered by the absence of the husband to accompany the children to study. This obligation is as if the duty of the mother, to mother barely had time me time.

The eighth statement, getting a percentage of 98.33% of parents think online learning makes it difficult for mothers to control the use of gadgets for themselves and their children and 1.67% choose that online learning can make them control their use of gadgets. The responsibility as an impromptu child's teacher and responsibility outside the home for working moms makes up the majority of this eighth statement. This is clear, doing children's assignments must take a long time because of limited network access, knowledge and understanding of learning applications on gadgets.

In the ninth statement, getting a percentage of 100% of parents thought that I had difficulty getting children to learn and do assignments. The majority of these mothers end up working on children's assignments because they do not understand how to teach their children and do not want to continue to fight with their children due to the work at hand.

The last statement is the tenth statement, getting a percentage of 93.33% of parents respond that I am unable to help my child master online learning programs or applications in carrying out their learning tasks. These mothers also admit that they are not able to make their children understand to be able to do tasks which are often through kinemaster video editing etc. or d Canva writing applications.

4. Conclusions

Based on these results, the average percentage of answers obtained by parents is that they feel stressed and unprepared. So, it can be concluded that parents feel stressed by online learning during the Covid-19 pandemic, and are not ready to return to the 4.0 era towards the 5.0 society era . The most significant reasons are the limited knowledge of mothers about current elementary age teaching materials, limited internet access and the increasingly difficult economy to provide quotas and the quarrels with children and husbands that often occur due to their lack of understanding of the teaching science with existing learning strategies and styles.

References

[1] Onyema EM. Impact of coronavirus pandemic on education. J. Educ. Pract. 2020;11(13):108–121. doi: 10.7176/jep/11-13-12.

[2] Yanti MT, Kuntarto E, Kurniawan AR. Pemanfaatan portal rumah belajar kemendikbud sebagai model pembelajaran daring di sekolah dasar. Adi Widya J. Pendidik. Dasar. 2020;10(1):61–68.

[3] Meidawati SA. persepsi siswa dalam studi pengaruh daring learning terhadap minat belajar IPA. SCAFFOLDING J. Pendidik. Islam dan Multikulturalisme. 2019. doi: 10.37680/scaffolding.v1i2.117.

[4] Kasih AP. 2020 June 16. Kompas.com.